## What is claimed is:

- 1). A process for producing an L-amino acid, which comprises cultivating the L-amino acid-producing bacterium in a culture medium resulting in production of the L-amino acid, and collecting the L-amino acid from the culture medium, wherein the culture medium contains a mixture of glucose and pentose sugars.
- 2). The process according to claim 1, wherein the pentose sugars are arabinose and xylose.
- 3). The process according to claim 2, wherein the mixture of sugars is a feedstock mixture of sugars obtained from cellulosic biomass.
- 4). The process according to claim 1, wherein the L-amino acid-producing bacterium is the bacterium belonging to the genus *Escherichia*.
- 5). The process according to claim 4, wherein the L-amino acid-producing bacterium is modified to have increased rate of pentose sugars utilization.
  - 6). The process according to claim 1, wherein the L-amino acid is L-isoleucine.
- 7). The process according to claim 6, wherein the bacterium has enhanced expression of genes for L-isoleucine biosynthesis.
  - 8). The process according to claim 1, wherein the L-amino acid is L-histidine.
- 9). The process according to claim 8, wherein the bacterium has enhanced expression of genes for L-histidine biosynthesis.
  - 10). The process according to claim 1, wherein the L-amino acid is L-threonine.
- 11). The process according to claim 10, wherein the bacterium has enhanced expression of genes for L-threonine biosynthesis.
  - 12). The process according to claim 1, wherein the L-amino acid is L-tryptophan.
- 13). The process according to claim 12, wherein the bacterium has enhanced expression of genes for L-tryptophan biosynthesis.